

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of the Claims:

1-8. (Canceled).

9. (Previously Presented) A network bridge, comprising:

a monitoring arrangement for monitoring volume of incoming and outgoing data flowing through the network bridge and its memory, wherein the monitoring arrangement for monitoring is configurable by a higher-level instance, and is configured so that in addition to an analysis of the data, an operation on the data is performed.

10. (Previously Presented) The network bridge according to claim 9, wherein the network bridge is for coupling IEEE 1394 buses.

11. (Previously Presented) The network bridge according to claim 9, wherein the higher-level instance includes at least one of a management and configuration layer for the network bridge.

12. (Previously Presented) The network bridge according to claim 9, wherein the monitoring arrangement for monitoring encompasses a software component within a network bridge architecture, the component having at least one of a gateway functionality and a firewall functionality.

13. (Previously Presented) The network bridge according to claim 9, wherein an extent of a data analysis by the monitoring arrangement for monitoring is adjustable.

14. (Canceled).

15. (Previously Presented) The network bridge according to claim 9, wherein an analysis of the data and operation on the data are performable in various layers of a layer model, including an OSI reference model.

16. (Previously Presented) The network bridge according to claim 9, wherein the monitoring arrangement for monitoring is configured to one of block and prioritize at least one of address interfaces, input interfaces, output interfaces, and logged data, on the basis of an evaluation.

17. (Currently Amended) A network system, comprising:

a plurality of network bridges, each of the network bridges including a monitoring arrangement for monitoring volume of incoming and outgoing data flowing through the network bridge and its memory, the means for monitoring being configurable by a higher-level instance, the monitoring arrangement for monitoring being individually configurable in each network bridge to allow each network bridge, independently of other of the network bridges, to be capable of performing functions of one of a gateway and a firewall;

wherein monitoring of the data volume includes interrupt transfer of at least one isochronous channel through limiting the number of data transfers for each of a plurality of network nodes[[:]], and

wherein the monitoring arrangement for monitoring is configured so that in addition to an analysis of the data, a manipulation of the data is performed [[as]] [[well]].

18. (Previously Presented) The system according to claim 17, wherein the higher-level instance includes a software layer having management and configuration responsibilities.

19. (Previously Presented) The system according to claim 17, wherein an extent of a data analysis by the monitoring arrangement for monitoring is adjustable, wherein the higher-level instance includes at least one of a management and configuration layer for the network bridge, and wherein the monitoring arrangement for monitoring encompasses a software component within a network bridge architecture, the component having at least one of a gateway functionality and a firewall functionality.

20. (Previously Presented) The system according to claim 19, wherein the network bridge is for coupling IEEE 1394 buses, and wherein the monitoring arrangement for monitoring is configured to one of block and prioritize at least one of address interfaces, input interfaces, output interfaces, and logged data, on the basis of an evaluation..

21. (Previously Presented) The system according to claim 19, wherein an analysis of the data and operation on the data are performable in various layers of a layer model, including an OSI reference model.

22. (Previously Presented) The network bridge according to claim 9, wherein an extent of a data analysis by the monitoring arrangement for monitoring is adjustable, wherein the higher-level instance includes at least one of a management and configuration layer for the network bridge, and wherein the monitoring arrangement for monitoring encompasses a software component within a network bridge architecture, the component having at least one of a gateway functionality and a firewall functionality.

23. (Previously Presented) The network bridge according to claim 22, wherein the network bridge is for coupling IEEE 1394 buses, and wherein the monitoring arrangement for monitoring is configured to one of block and prioritize at least one of address interfaces, input interfaces, output interfaces, and logged data, on the basis of an evaluation..

24. (Previously Presented) The network bridge according to claim 22, wherein an analysis of the data and operation on the data are performable in various layers of a layer model, including an OSI reference model.

25. (New) The network bridge according to claim 9, wherein the operation on the data includes manipulating data from a user data layer.

26. (New) The network bridge according to claim 9, wherein the operation on the data includes analyzing data from a user data layer.

27. (New) The network bridge according to claim 9, wherein the arrangement for monitoring is configured to monitor a data volume over a specific period of time and wherein the arrangement for monitoring is configured to control the data flow, responsive to measuring at least a threshold volume for the specific period of time, so that each individual node is permitted only a specific number of data transfers, such that further data transfers are ignored.

28. (New) The network bridge according to claim 27, wherein the controlling of the data flow includes interrupting transfer of all isochronous channels and applying the specific number of data transfers to transfers on asynchronous channels.

29. (New) The network bridge according to claim 9, wherein the network bridge is for coupling IEEE 1394 buses, wherein the higher-level instance includes at least one of a management and configuration layer for the network bridge, wherein the monitoring arrangement for monitoring encompasses a software component within a network bridge architecture, the component having at least one of a gateway functionality and a firewall functionality, wherein an extent of a data analysis by the monitoring arrangement for monitoring is adjustable, wherein an analysis of the data and operation on the data are performable in various layers of a layer model, including an OSI reference model, and wherein the monitoring arrangement for monitoring is configured to one of block and prioritize at least one of address interfaces, input interfaces, output interfaces, and logged data, based on an evaluation.

30. (New) The network bridge according to claim 29, wherein the operation on the data includes analyzing or manipulating data from a user data layer, wherein the arrangement for monitoring is configured to monitor a data volume over a specific period of time and wherein the arrangement for monitoring is configured to control the data flow, responsive to measuring at least a threshold volume for the specific period of time, so that each individual node is permitted only a specific number of data transfers, such that further data transfers are ignored, and wherein the controlling of the data flow includes interrupting transfer of all isochronous channels and applying the specific number of data transfers to transfers on asynchronous channels.